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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,806	09/25/2003	Malte Blomeyer	2001P04429WOUS	7583

7590 01/25/2005

SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPT.
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

KIM, TAE JUN

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,806

Applicant(s)

BLOMEYER, MALTE

Examiner

Ted Kim

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-17 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09/25/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in GB on 5/18/01. It is noted, however, that applicant has not filed a certified copy of the GB application as required by 35 U.S.C. 119(b).

Claim Objections

2. Claim 1 is objected to because of the following informalities: on line 10 “comprising and” should be –comprising--.
claim 6, line 1, before “5” –claim—should be inserted.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 7, 9-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Becker (6,152,724). Becker teaches a burner apparatus for burning fuel and air to combustion gas comprising a premixing chamber 4 for premixing the fuel and air with an air inlet for the air 5 to enter said premixing chamber and having a cross-sectional area; a fuel inlet 11, 12 for the fuel to enter said premixing chamber an outlet for a mixture of air and fuel to exit said premixing chamber, wherein, said fuel inlet 11, 12 is located between

said air inlet and said outlet, further comprising at least one air blocking member 13 situated at the air inlet for stabilizing a burner premixing flame by locally blocking the flow of air entering said premixing chamber so that downstream of said outlet a locally inhomogeneous fuel concentration (e.g. col. 3, lines 5-24 or col. 5, lines 56+, note that largely homogenous implies local areas of inhomogeneous) which inherently generates a locally hot stream of combustion gas that is hotter than the average flame temperature; said air inlet has in said cross-sectional area an outer periphery and with said at least one blocking member located at the outer periphery extending towards said main axis; swirl elements 9; a pilot burner may be present (col. 5, lines 31+); a gas turbine is taught (see abstract); recirculation zone 10 is taught; the claimed area ratios are shown in either Figs 4 or 5.

5. Claims 1-3, 7, 9-13, 15, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Poeschl et al (6,189,320). Poeschl et al teach a burner apparatus for burning fuel and air to combustion gas comprising a premixing chamber for premixing the fuel and air with an air inlet for the air to enter said premixing chamber and having a cross-sectional area; a fuel inlet 6 for the fuel to enter said premixing chamber, an outlet for a mixture of air and fuel to exit said premixing chamber, wherein, said fuel inlet is located between said air inlet and said outlet, further comprising at least one air blocking member 4 situated at the air inlet for stabilizing a burner premixing flame by locally blocking the flow of air entering said premixing chamber so that downstream of said outlet a locally inhomogeneous fuel concentration results (col. 3, lines 5+, note that

largely homogenous implies local areas of inhomogeneous) which inherently generates a locally hot stream of combustion gas that is hotter than the average flame temperature; said air inlet has in said cross-sectional area an outer periphery and with said at least one blocking member located at the outer periphery extending towards said main axis; swirl elements 5; a pilot burner 9 is present; a gas turbine is taught (see abstract); recirculation zone 10 is inherently present.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker (6,152,724). Becker appears to illustrate the claimed blocking area ratios of the blocking members. In order to obviate any doubt, it would have been obvious to one of ordinary skill in the art to employ the claimed ratios, as an obvious matter of finding the workable ranges in the art.

8. Claims 1-3, 7, 9-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Becker (6,152,724) in view of Becker (5,451,160). Becker '724 teaches the blocking members 13 in the inlet region but not in the upstreammost portion. Becker '160 shows a blocking projection at the upstreammost portion. It would have been obvious to one of

ordinary skill in the art to plate the blocking projections at the upstreammost portion, as a well known location for protrusions.

9. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker (6,152,724) in view of either Zappa (4,762,487) or Gutmark et al (6,196,835). Becker teaches various aspects of the claimed invention but do not teach the blocking members width decreasing toward the main axis. Zappa teaches blocking members 35 for the air inlet and which have a triangular shape. Gutmark et al teach having triangular shaped blocking members 32. It would have been obvious to one of ordinary skill in the art to employ blocking members having a triangular shape, as an equivalent shape for providing a fluid blockage.

Allowable Subject Matter

10. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and to correct the objections made to claim 1.

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ted Kim whose telephone number is 571-272-4829. The Examiner can be reached on regular business hours before 5:00 pm, Monday to Thursday and every other Friday.

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The fax numbers for the organization where this application is assigned are

703-872-9306 for Regular faxes and 703-872-9306 for After Final faxes.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler, can be reached on 571-272-4834.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist of Technology Center 3700, whose telephone number is 703-308-0861. General inquiries can also be directed to the Patents Assistance Center whose telephone number is 800-786-9199. Furthermore, a variety of online resources are available at <http://www.uspto.gov/main/patents.htm>



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